

Title	Test machines and/or equipment for vibration in the mechanical engineering industry		
Level	5	Credits	12

Purpose	People credited with this unit standard are able to prepare for testing vibration of machines and/or equipment; and test machines and/or equipment for vibration and analyse results.
----------------	---

Classification	Mechanical Engineering > Maintenance and Diagnostics in Mechanical Engineering
-----------------------	--

Available grade	Achieved
------------------------	----------

Entry information	
Recommended skills and knowledge	Unit 21911, <i>Demonstrate knowledge of safety on engineering worksites</i> , or demonstrate equivalent knowledge and skills.

Explanatory notes

- 1 References
 Hazardous Substances and New Organisms (HSNO) Act 1996.
 Health and Safety in Employment Act 1992.
 Accident Compensation Corporation and Department of Labour. *Metal Industry Guidelines for Safe Work*. Wellington: ACC, 2007. Available from <http://www.acc.co.nz>.
- 2 Definitions
Industry practice – safe and sound practices accepted by the mechanical engineering industry.
Safety guidelines – guidelines for the safe operation of machinery and tools, such as those listed in the references, as well as guidelines for specific machines in workshops.
Worksite procedures – operational procedures put in place by the candidate's employer. These include site safety procedures, equipment operating procedures, job procedures, quality assurance processes and procedures, and other procedures for the handling and disposal of materials and waste.
- 3 The following apply to this unit standard:
 - a All activities must demonstrate safe working practices.
 - b All activities must be completed independently and reported within agreed timeframes.
 - c Evidence of testing at least five different machines and/or equipment for vibration is required.

Outcomes and evidence requirements

Outcome 1

Prepare for testing vibration in machines and/or equipment.

Evidence requirements

- 1.1 Principles and need for vibration analysis are ascertained.
- 1.2 Vibration specification limits are established from manufacturer's publications for machine or equipment.
- 1.3 Test procedure and testing equipment selected are appropriate for machine or equipment in accordance with industry practice and worksite procedures.

Outcome 2

Test machines and/or equipment for vibration and analyse results.

Evidence requirements

- 2.1 Tests are carried out on machines or equipment in accordance with worksite procedures and safety guidelines.
- 2.2 Test results are interpreted and compared with machines or equipment specification in accordance with worksite procedures.
- 2.3 Machines or equipment not conforming to specification are identified and reported for rectification in accordance with worksite procedures.
- 2.4 Test results are recorded in accordance with worksite procedures.

Planned review date	31 December 2016
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 October 1994	31 December 2011
Revision	2	14 April 1997	31 December 2011
Revision	3	5 January 1999	31 December 2011
Revision	4	18 September 2001	31 December 2011
Rollover and Revision	5	25 July 2006	31 December 2011
Rollover	6	20 June 2008	31 December 2014
Review	7	17 November 2011	N/A

Consent and Moderation Requirements (CMR) reference

0013

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMR). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact Competenz on qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.